

Amendments to the Specification:

Please replace the paragraph beginning at page 3, line 25, with the following rewritten paragraph:

-- U.S. Patent No. 4,767,985 to Shearer, Jr., et al. is directed to a claw grip contact probe for testing and diagnosing multi-lead electrical flat packs. The Shearer probe device includes a body and a sliding plate. The sliding plate contains two sets of holes into which are inserted spring-loaded electrical contact probes for making contact with the leads of the flat packs. The body includes comb teeth for orienting the body over the leads of the flat pack, as well as gripping means having hook ends for securely fastening the probe device to the flat pack being tested or diagnosed. The gripping means include an outwardly flared portion against which the sliding plate means exerts inward lateral pressure causing the hook ends to grip underneath the flat pack at each corner thereof to clamp it securely in place. There are many problems with the Shearer device. For example, one problem with the Shearer device is that it is relatively complicated to produce because of its two-part construction as well as the complicated shape of both parts. Another problem with the Shearer device is that its gripping means and hooks can easily break when the Shearer device is being placed or removed on the flat pack. Yet another problem with the Shearer device is that a different sized claw grip must be made for each size and shape flat pack. This could require the user to purchase and store an incredible number of different sized claw grips. Still another problem is that the Shearer device must contact both sides of the flat pack because it has to grip both sides. The gripping feature of the Shearer device can also cause problems with bending or breaking the leads of the flat pack. --

Please replace the paragraph beginning at page 9, line 2, with the following rewritten paragraph:

-- The present invention relates to a guide 20 that may guide, lead, and/or direct a tip 22 towards a transmission path 24. For purposes of simplicity, the general

term "guide 20" will be used when referring to all guide embodiments including those ~~[[of]]~~ designated with 20a-20j. This feature allows more accurate placement of a tip 22 on a transmission path 24. The guide 20 of the present invention may also facilitate a relatively secure contact between a tip 22 and a transmission path 24. It should be noted that "relatively secure" is relative as compared to contact made without the guide 20. Accordingly, the contact does not have to be firm or secured, but only has to help the user make and maintain the contact between the tip 22 and the transmission path 24. As mentioned, conventional tips 22 can easily slip off transmission paths 24 of circuit board components 26, especially pointed, rounded, or irregularly shaped transmission paths 24. By facilitating a relatively secure contact between a tip 22 and a transmission path 24, the guide 20 of the present invention helps to prevent such slipping. After slipping off a transmission path 24, the exposed conductive material on a conventional tip 22 may contact, for example, two transmission paths 24 at the same time and cause an electrical short and possibly damage the component. By facilitating a relatively secure contact between a tip 22 and a transmission path 24, the guide 20 of the present invention helps to prevent such short-circuiting and the damage it may cause. The guide 20 may also have general protection properties such as protecting transmission paths 24 from damage caused by accidental probing, dropping of heavy items thereon, dropping of conductive items thereon, or any contacting that is unwanted. --

Please replace the paragraph beginning at page 9, line 24, with the following rewritten paragraph:

-- For the purposes of this invention, a tip 22 may be, for example, any device that may be used as an input for a test probe. For the purposes of this invention, transmission paths 24 may be, for example, leads (e.g. through-hole leads), legs, pins, pin headers, contact headers, or other transmission paths ~~[[though]]~~ through which electrical signals flow into and out of the circuit board components 26. --

Please replace the paragraph beginning at page 10, line 1, with the following rewritten paragraph:

-- The guide 20 preferably includes at least one guide insulator 30 having at least one insulated exterior surface 32. For purposes of simplicity, the general term "guide insulator 30" will be used when referring to all guide insulator embodiments including those [[of]] designated with 30a-30j. The insulated exterior surface 32 prevents short-circuiting with adjacent transmission paths 24 and/or circuit board components 26. The guide insulator(s) 30 defines at least one passageway or bore 34 such that each passageway 34 has a first tip passageway end 36 and a second transmission path passageway end 38. In some embodiments, the first tip passageway end 36 is directly opposite the second transmission path passageway end 38. In alternative embodiments, the first tip passageway end 36 is not directly opposite the second transmission path passageway end 38. The first passageway end 36 is suitable for accommodating a tip 22. The second passageway end 38 is suitable for accommodating a transmission path 24. The tip 22 contacts the transmission path 24 through the passageway 34 when the tip 22 is positioned in the first passageway end 36 and the transmission path 24 is positioned within the second passageway end 38. --

Please replace the paragraph beginning at page 10, line 16, with the following rewritten paragraph:

-- The guide 20 may also include a contact enhancing mechanism. For example, in shown exemplary embodiments of FIGS. 6-8, the at least one passageway 34 includes a contact enhancing mechanism such as a disc or plate that floats substantially perpendicular within the passageway 34 of a ~~clam-shell-like~~ clamshell-like insulator 30.--

Please replace the paragraph beginning at page 11, line 10, with the following rewritten paragraph:

-- The advantages of inserting a transmission path 24 within the second passageway end 38 can be seen by comparing it to the probe guides disclosed in U.S. Patent No. 6,281,695 to Chung, et al. The Chung indicator is an integrated circuit package pin indicator that may include probe guides. The Chung probe guides are holes or slots in the top plate that lay over pins of the integrated circuit package. Without the legs and projections that are used to hold the Chung indicator to the integrated circuit package, the top plate would simply slip off. These legs and projections, however, limit the integrated circuit packages to which the Chung indicator can mate to a particular size and shape. In addition, a particularly fine and/or flexible tip 22 could slip under the Chung top plate and accidentally touch adjacent transmission paths 24. --

Please replace the paragraph beginning at page 11, line 20, with the following rewritten paragraph:

-- For exemplary purposes only, a guide 20 may have two passageways 34 such that it accommodates two transmission paths 24 and two tips 22. A guide 20 having two passageways 34 would be suitable for use when a user may ~~[[wanted]]~~ want to use a differential test probe having two tips 22 to monitor or test the signal between two transmission paths 24. To do this the user would place the guide 20 over the transmission paths 24 to be monitored or tested by inserting the transmission paths 24 through the second passageway end 38 such that the transmission paths 24 are accessible through the passageway 34. The user would then insert each of the tips 22 into respective first passageway ends 36 opposite the respective transmission paths 24. Depending on the configuration, the two tips 22 would electrically contact directly or indirectly the two transmission paths 24 through the passageway 34. In one preferred embodiment, the first tip passageway end 36 of the passageways 34 is channeled such

that the tips 22 easily slide into the passageways 34 and are guided into contact with the transmission paths 24. --

Please replace the paragraph beginning at page 17, line 27, with the following rewritten paragraph:

-- FIGS. 9 and 10 show an eighth exemplary embodiment of a guide 20g of the present invention having multiple passageways 24 in a staggered configuration for use with a circuit board component 26 having multiple transmission paths 24. Specifically, the guide 20g includes a guide insulator 30g that defines at least one passageway 34. This embodiment would function in much the same manner as the aforementioned examples, but would be particularly suitable for use with a relatively flat circuit board component 26. This embodiment would take into consideration that circuit boards are often vertically (parallel above and below the circuit board, regardless of actual orientation) tightly packed together such that it is undesirable to add height to a circuit board component 26 by stacking additional items thereon. This embodiment may also be able to provide access to a circuit board component 26 that is hard to access because of limited vertical space. This embodiment would also take into consideration that circuit boards have limited horizontal real estate (as opposed to the embodiment shown in FIG. 11). Accordingly, alternative embodiments could be narrower and/or staggered in more than two lines. An extreme example would have transmission paths 24 that translate between a complete horizontal to a complete vertical. It should be noted that alternative embodiments might partially or completely cover the transmission paths 24 for added protection. --

Please replace the paragraph beginning at page 18, line 15, with the following rewritten paragraph:

-- FIG. 11 shows a ninth exemplary embodiment of a guide 20h of the present invention having multiple passageways 24 in a fanned out configuration for use with a circuit board component 26 having multiple transmission paths 24. Specifically,

the guide 20h includes a guide insulator 30h that defines at least one passageway 34. This embodiment would function in much the same manner as the aforementioned examples, but would be particularly suitable for use with a relatively flat circuit board component 26. This embodiment would take into consideration that circuit boards are often vertically (parallel above and below the circuit board, regardless of actual orientation) tightly packed together such that it is undesirable to add height to a circuit board component 26 by stacking additional items thereon. This embodiment may also be able to provide access to a circuit board component 26 that is hard to access because of limited vertical space. In other words, this embodiment would be particularly suitable for circuit board components 26 that are so vertically close together that they ~~[[are]]~~ almost cannot be probed. It should be noted that alternative embodiments might partially or completely cover the transmission paths 24 for added protection. --

Please replace the paragraph beginning at page 19, line 1, with the following rewritten paragraph:

-- FIG. 12 shows a tenth exemplary embodiment of a guide 20i of the present invention having tip positioning capabilities. Specifically, the guide 20i includes a guide insulator 30i that defines at least one passageway 34. This embodiment would function in much the same manner as the aforementioned examples, but would be particularly suitable for use with a pair of gripping probe tips 22 that are inwardly biased such that they tend to depress inward. Such a pair of gripping probe tips 22 can be temporarily forced outward, but when released will move inward and, in some embodiments, grip any item therebetween. Using such a pair of gripping probe tips 22, the probes are forced outward to grip the sides of the guide insulator 30i by moving the probe head, the probe tips 22 are forced further outward along the arrows A and A' until they reach respective passageways 34 at which time the tips 22 move inward along the arrows B and B'. --

Please replace the paragraph beginning at page 20, line 9, with the following rewritten paragraph:

-- FIG. 16 shows a stack 60 of divider guide insulators 30j' removably interconnected. As mentioned above, the divider guide insulators 30j' are preferably thin flexible insulating material that can index between ~~[[of]]~~ close transmission paths 24. In one preferred embodiment of the present invention, the divider guide insulators 30j' are supplied to end users as a stack 60 of divider guide insulators 30j' that have adhesive or other connection means 62 at one end. As the end user needs a divider guide insulator 30j', he merely peels or otherwise removes it from the stack 60. It should be noted that the size, dimensions, and shape of the divider guide insulators 30j' is meant to be exemplary and is not meant to limit the scope of the invention. --

Please replace the paragraph beginning at page 20, line 18, with the following rewritten paragraph:

-- FIG. 17 shows a mounting apparatus 30j'' that is dividable. In this embodiment, the end user is supplied with a strip or a roll of mounting apparatus 30j''. FIG. 17 shows scoring 64 on both sides of the mounting apparatus 30j'' that may be used ~~[[to]]~~ for dividing the mounting apparatus 30j''. The user may use only one mounting apparatus 30j'' or many mounting apparatus 30j''. It should be noted that the design, size, dimensions, and shape of the mounting apparatus 30j'' is meant to be exemplary and is not meant to limit the scope of the invention. In fact, alternative mounting apparatus 30j'' may be used. FIG. 17 also shows a layer of adhesive 66 that could be used to secure the mounting apparatus 30j'' to the surface of circuit board component 26. --

Please replace the paragraph beginning at page 22, line 3, with the following rewritten paragraph:

-- It should be noted that the shape of the passageway 34 might be adapted for a particular use. For example, the passageway 34 shape may be square, circular, conical, or rectangular in cross-section to accommodate a similarly shaped transmission path 24 and/or tip 22. Similarly, the length of the passageway 34 may be adapted to accommodate different transmission paths 24 and/or tips 22. The interior surface of the passageway 34 may include additional mechanisms (e.g. ridges, conductive coatings, and/or insulating coatings) depending on the desired use. --